

By way of illustration, the data for a triclinic substance are given, and it is shown that if all the suggestions listed above are adopted, only one fourth as much space as heretofore would be required for recording the data, and of course a marked economy of time would be effected.

On the whole, the impression produced by this book is favorable. The saving of the scientist's time, and of publication space, are both urgent necessities in these days. The reviewer feels, however, that Dr. Barker has gone somewhat too far, and is recommending procedures which render the interpretation of published data unduly difficult. If all authors were equally skilled in interpreting their measurements, the omission of angle ranges might be permissible, but since as a matter of fact one student can often improve on the work of a predecessor, the recording of full data is likely to be of real value. The slight additional time needed to adjust fundamental angles by the measurements of all forms seems well justified by the increase in knowledge of the crystal thus obtained. The failure to publish values which have been calculated, or their publication in such an obscure form that it is a puzzle to interpret them, will merely result in the need for others to duplicate the original work. The "new system of practice" resolves itself then into a few valuable suggestions, and a number of attempted simplifications which seem likely to make the way less easy for future crystallographers.

W.

## NOTES AND NEWS

Every mineralogist will regret to learn of the death of Dr. Mauzelius, chemist of the Swedish Geological Survey, whose great skill in determining rare elements, although present in small amounts, has led to the establishment of numerous new mineral species.

Dr. Rudolph Koechlin has retired from the Directorship of the Mineralogical Division of the State Natural History Museum in Vienna, and has been succeeded by Dr. Hermann Michel.

In the review of Samuel G. Gordon's book, *The Mineralogy of Pennsylvania*, published in a recent issue of *The American Mineralogist* (vol. 8, p. 12) the price was erroneously given as \$3.75 instead of \$2.75.

Grants for research made by the American Association for the Advancement of Science include in the field of geology the following concessions: V. C. Allison, Bureau of Mines, Pittsburgh, Pa., \$150 for assistance in a study of rate of growth in a micro-chemical study of oils, shales and coal.

We congratulate the Board of Trustees of the University of Chicago in their announcement that Professor R. A. F. Penrose, Jr., of Philadelphia, has *again* contributed five hundred dollars to help provide the full eight issues during the year of the *Journal of Geology*.

A new mineralogical society, to be known as *The Mineralogical Society of Washington, D. C.*, was organized Friday, February 23, 1923. The transactions of the first meeting, held at the residence of Dr. W. T. Schaller, will be given in detail in an early issue of this Journal.

Drs. D. Coster and G. Hevesy of the Copenhagen Institute for Theoretical Physics have recently announced the discovery of a new element with atomic number 72, for which the name *hafnium* was proposed. The discovery was the result of X-ray spectroscopy upon extractions from zirconium minerals. As much as 5% of this element was found in samples of commercial zirconium oxide.

We deeply regret to note the death of the veteran mineral collector, Mr. Clarence S. Bement of Philadelphia, Pa. His love for minerals and keen appreciation of fine specimens resulted in a magnificent private collection, which in 1900 was sold to the late J. P. Morgan, whose name it now bears. The collection is now displayed in the American Museum of Natural History in New York City. An extended notice of Mr. Bement's life will appear later.

Richard V. Ageton, of the Bureau of Mines, who has been doing examination work for the War Minerals Relief Commission, is acting as assistant chief mining engineer of the bureau.

Sir William H. Bragg, Quain professor of physics in the University of London, has been elected a corresponding member of the Paris Academy of Sciences in the section of physics.

All crystallographers will regret to hear of the death of Professor Karel Vrba, aged 77 years, formerly Professor of Mineralogy at the Bohemian University of Prague, Bohemia.

## ABSTRACTS—MINERALOGY

EXPERIMENTS ON THE ARTIFICIAL PRODUCTION OF DIAMOND.  
C. A. PARSONS. *Phil. Trans. Roy. Soc.*, 220, 67-107, 1919. THE FORMATION OF DIAMOND. C. A. PARSONS. *J. Inst. Metals*, 20, 5-24, 1918; both thru *Min. Abstr.*, 1, 232, 1921.

The conclusion reached from several thousand experiments is that pressure is unessential to the artificial production of diamond, and that the diamond is produced from occluded gases in the iron after solidification of the metal. E. F. H.

METALLIC COPPER IN A METEORIC VEIN. T. T. QUIRKE. *Econ. Geol.*, 14, 619-24, 1919.

The Richardson meteorite contains small flakes of copper in veins of nickeliferous iron and troilite. E. F. H.

THE PIPERNOID TUFFS OF CAMPANIA, AND THEIR MINERALS.  
F. ZAMBONINI. *Mem. Descr. Carta Geol. Italia*, 7, pt. 2, 130 pp., 1919; thru *Min. Abstr.*, 1, 106, 1920.

The following minerals are described: fluorite, new forms (553), (774), (766); nocerite; hydromagnesite; hydrodolomite; sanidine; acmite-augite; microsommite; marialite; fluosiderite; grothine; biotite rich in CaO (14%) and hornesite. Analyses, optical determinations, and crystallographic measurements are given in most cases. E. F. H.